

equal, and together longer than the remaining eight joints, the proportionate lengths of the joints being as follows,—17, 12, 4, $4\frac{1}{2}$, 1, 1, $2\frac{1}{2}$, $3\frac{1}{2}$, $1\frac{1}{2}$, $3\frac{1}{2}$; the first joint has two multifid, spined tubercles on its anterior surface, and the posterior surface is armed with a series of short, closely set; blunt teeth; the anterior margin of the second joint has four forward-pointing sub-triangular teeth, and at the apex a much larger dagger-like spine; the other joints are scarcely at all spinous, but bear several long hairs and an olfactory filament. Posterior antennæ about half as long as the anterior pair, primary branch composed of four slender, elongated, and nearly equal joints; secondary branch attached to the apex of the first joint of the primary branch, and composed of four joints, of which the two median ones are very small. The teeth of the mandible are very deeply cleft, strong and sharp; the joints of the palp long, slender, and bearing long setæ. The first four pairs of feet have both branches three-jointed and of equal length, and the marginal spines of the outer branch are duplicated, having a very long ciliated, awl-shaped spine attached below each shorter spine. The fifth foot is one-branched only, composed of three nearly equal joints, the second joint bearing a large marginally aculeated apical spine, the third joint five of similar type, but smaller. The caudal setæ are considerably longer than the body of the animal.

This wonderful species was found—but unfortunately one specimen only, and that in a dried state—amongst material taken in the tow-net at trawl, at a depth of 2200 fathoms, lat. $37^{\circ} 29' S.$, long. $27^{\circ} 31' W.$ This single specimen was apparently much shrunk and distorted, owing to its having been dried amongst the mud in which it was taken, and on this account many of the details of structure have been very imperfectly made out; the tail-setæ, for instance, and the minor details of the mouth-organs were partly indistinguishable, the limbs much matted together, and the natural contours doubtless in other parts much altered.

Considering that this is by far the most remarkable Copepod met with amongst the Challenger captures, one must regret that some means were not found of more completely preserving Microzoa, not only from abyssal depths, but from the sea-bed of much shallower water. I have long been aware that it is by such means that the most interesting additions to the micro-fauna of the British seas, at any rate, are to be secured; and I cannot doubt that like processes would give like results in other regions. The method which I have myself successfully adopted is, after sifting out the coarse parts of a dredging, to plunge the fine residue into a quantity of sea water,—then, after allowing a few moments for most of the inorganic matter to settle, to strain off the supernatant water, which, of course, contains most of the swimming Microzoa. These, after being thus secured on a muslin filter, may be allowed to clean themselves by immersion for a short period in a vessel of salt water, and will then be obtained in a condition suitable for examination.